RCHP-135US

Appln. No.: 10/567,872

Amendment Dated January 5, 2010

Reply to Office Action of November 23, 2009

<u>Amendments to the Claims:</u> This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

- 1. (**Currently amended**) A composition comprising a metal surface chemically coordinated to a surface modifier and a modified protein, wherein the modified protein comprises a fusion protein, or a CAR protein, or a fragment of a CAR protein, and wherein the modified protein is covalently bound to the surface modifier directly or via a linker.
- 2. (Canceled)
- 3. (Previously presented) The composition of claim 1, wherein the modified protein is covalently bound to the surface modifier through a thiol residue and a linker.
- 4. 7. (Canceled)
- 8. (Previously presented) The composition of claim 1, wherein the metal surface is a surface of a medical device.
- 9. (Original) The composition of claim 8, wherein the medical device is selected from the group consisting of a stent, a heart valve, a wire suture, a joint replacement, a urinary dilator, an orthopedic dilator, a catheter and an endotracheal tube.
- 10. (Original) The composition of claim 8, wherein the medical device is at least one of an internal device and an external device.
- 11. 16. (Canceled)
- 17. (Withdrawn) A method for preparing the composition of claim 1, the method comprising: (a) providing a protein; (b) modifying the protein with a reagent to contain a reactive group, thereby yielding a modified protein; (c) providing a surface; (d) treating the surface with a surface modifier comprising a linker and a functional group; (e) reacting the modified protein with the functional group on the surface in order to covalently bind the modified protein to the surface via the linker; and optionally (f) binding the gene transfer vector to the modified protein.

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18. (Withdrawn) The method of claim 17, wherein the protein is a CAR protein or fragment of CAR.

- 19. (Withdrawn) The method of claim 18, wherein the fragment of CAR is an immunoglobulin D1 domain of CAR.
- 20. (Withdrawn) The method of claim 17, wherein the protein is a fusion protein.
- 21. (Withdrawn) The method of claim 20, wherein the fusion protein comprises a fragment of CAR ligated to a receptor targeting ligand by intein-mediated protein ligation.
- 22. (Withdrawn) The method of claim 21, wherein the fragment of CAR is an extracellular domain of CAR or an immunoglobulin D1 domain of CAR.
- 23. (Withdrawn) The method of claim 21, wherein the receptor targeting ligand is selected from the group consisting of apolipoprotein E, transferrin, a vascular endothelial growth factor, a transforming growth factor-beta, a fibroblast growth factor, an RGD containing peptide and folic acid.
- 24. (Withdrawn) The method of claim 17, wherein the reagent is a cysteine and the reactive group is a thiol group or an avidin-biotin affinity construct.
- 25. (Withdrawn) The method of claim 17, wherein the surface is a surface of a medical device.
- 26. (Withdrawn) The method of claim 25, wherein the medical device is selected from the group consisting of a stent, a heart valve, a wire suture, a joint replacement, a urinary dilator, an orthopedic dilator, a catheter and a endotracheal tube.
- 27. (Withdrawn) The method of claim 25, wherein the medical device is at least one of an internal device and an external device.
- 28. (Withdrawn) The method of claim 17, wherein the surface modifier is polyallylamine bisphosphonate, the linker is an entity containing a reactive succinimide and a pyridyl-dithiol group, and the functional group is selected from the group consisting of an amino group, a sulfhydryl group, biotin reactive succinimides, epoxy-residues and aldehyde functionalities.

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29. - 33. (Canceled)

34. (Canceled)

- 35. (**Currently amended**) The composition of claim 1, wherein the modified protein is a fusion protein and the fusion protein comprises a fragment of a CAR protein and a receptor targeting ligand.
- 36. (Previously presented) The composition of claim 35, wherein the fragment of the CAR protein is an extracellular domain of CAR or an immunoglobulin D1 domain of CAR.
- 37. (Previously presented) The composition of claim 35, wherein the receptor targeting ligand is selected from the group consisting of apolipoprotein E, transferrin, a vascular endothelial growth factor, a transforming growth factor-beta, a fibroblast growth factor, an RGD containing peptide, and folic acid.

38. - 40. (Canceled)